

OIB - HU-25C Guardian 10/09/15 Science Report

Aircraft:

[HU-25A Guardian #525](#) ([See full schedule](#))

Date:

Friday, October 9, 2015

Mission:

OIB

Mission Location:

Kangerlussuaq, Greenland

Mission Summary:

Mission: Falcon Umanaq B (priority: high)

This mission is a shortened version of the Umanaq B flight last flown in Spring 2015. It has been shortened to accommodate the shorter range of the Falcon aircraft by paring the original six coast-parallel lines down to four, and by removing the short lines over Disko Island and the Nussuaq Peninsula.

We expected better weather than we actually saw today. Morning satellite images showed only a few isolated bands of cirrus clouds near Kangerlussuaq. These cirrus bands were associated with a low pressure system encroaching on southwest Greenland from the Davis Strait. The coastal area along Disko Bay and to the north was completely clear. By the time we reached the Jakobshavn Glacier area, however, the cirrus bands had moved north, and substantial haze had also moved in. Farther north along our primary Umanaq lines, the weather was clear except at the southern extremities of these lines, and most of our data loss was in the transit lines across the Jakobshavn basin. Overall, we estimate successful data collection along more than 90% of the mission.

All instruments performed well today.

We conducted a ramp pass at 10,000' MSL.

Data volumes:

DMS: 17.5 Gb

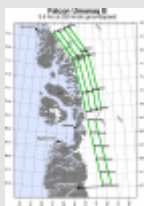
Narrow Swath ATM: 24 Gb

FLIR: 1.9 Gb

total data collection time: 3.6 hrs

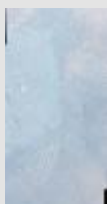
Images:

Map of Falcon - Umanaq B



[Read more](#)

DMS mosaic of Jakobshavn Glacier



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Surface texture above Rink Glacier



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Rink Glacier



[Read more](#)

Submitted by:

John Sonntag on 10/09/15

Related Flight Report:

HU-25C Guardian 10/09/15

Flight Number:

OIB2015 Arctic Umanaq B

Payload Configuration:

ATM & DMS

Nav Data Collected:

No

Total Flight Time:

3.9 hours

Submitted by:

Luci Crittenden on 10/09/15

Flight Segments:

From:	BGSF	To:	BGSF
Start:	10/09/15 10:15 Z	Finish:	10/09/15 14:10 Z
Flight Time:	3.9 hours		
Log Number:	16F002	PI:	John Woods
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryosphere & International Polar Year		
Purpose of Flight:	Science		
Comments:	OIB completed the Umanaq B mission this morning. Weather in areas of interest not suitable for another afternoon sortie. Next flight scheduled for Saturday, Oct 10th, weather permitting.		

Flight Hour Summary:

	15F005	16F002
Flight Hours Approved in SOFRS	100	
Flight Hours Previously Approved		67.4
Total Used	32.6	65.3
Total Remaining		2.1

16F002 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
10/05/15	OIB2015 Arctic Sea Ice Central	Science	3.6	3.6	63.8
10/05/15	OIB2015 Arctic Sea Ice East	Science	3.8	7.4	60
10/06/15	OIB2015 Arctic Ice-Sat2 North	Science	4	11.4	56

10/07/15	OIB2015 Arctic Transit Thule to Kangerlussuaq	Transit	2	13.4	54
10/08/15	OIB2015 Arctic Southwest Coastal A	Science	3.8	17.2	50.2
10/08/15	OIB2015 Arctic Thomas-Jakobshavn 01	Science	3.7	20.9	46.5
10/09/15	OIB2015 Arctic Umanaq B	Science	3.9	24.8	42.6
10/13/15	OIB2015 Arctic Jakobshavn Equip Store	Science	2.9	27.7	39.7
10/13/15	OIB2015 Arctic Southeast Coastal A	Science	3.6	31.3	36.1
10/18/15	OIB2015 Arctic Southeast Coastal B	Science	4.1	35.4	32
10/19/15	OIB2015 Arctic Helheim-Kangerdlugussuaq	Science	3.7	39.1	28.3
10/19/15	OIB2015 Arctic Helheim-Kangerdlugussuaq Gap B	Science	3.9	43	24.4
10/20/15	OIB2015 Arctic Jakobshavn Mop-Up	Science	3.7	46.7	20.7
10/20/15	OIB2015 Arctic Southwest Coastal B	Science	3.7	50.4	17
10/21/15	OIB2015 Arctic Southwest Coastal C	Science	3.4	53.8	13.6
10/21/15	OIB2015 Arctic K-EGIG-Summit	Science	3.7	57.5	9.9
10/22/15	OIB2015 Arctic Mopup South	Science	2	59.5	7.9
10/22/15	OIB2015 Arctic Ferry BGSF-CYYR	Ferry	2.2	61.7	5.7
10/23/15	OIB2015 Arctic Ferry CYYR-KRIC	Ferry	3.3	65	2.4
10/23/15	OIB2015 Arctic Ferry CYYR-KRIC	Ferry	0.3	65.3	2.1

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Page Last Updated: April 22, 2017

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Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

15F005 Flight Reports					
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
09/15/15	OIB #1	Check	2.7	2.7	97.3
09/20/15	OIB #2, 3, 4	Ferry	2.7	5.4	94.6
09/21/15	OIB #2, 3, 4	Ferry	2.3	7.7	92.3
09/21/15	OIB #2, 3, 4	Ferry	2	9.7	90.3
09/23/15	OIB2015 Arctic North Central Gap 02	Science	3.9	13.6	86.4
09/24/15	OIB2015 Arctic Northwest Coastal A	Science	3.7	17.3	82.7
09/25/15	OIB2015 Arctic Northwest Coastal B	Science	3.8	21.1	78.9
09/28/15	OIB2015 Arctic Sea Ice West	Science	3.7	24.8	75.2
09/30/15	OIB2015 Arctic North Central Gap 01	Science	3.9	28.7	71.3
09/30/15	OIB2015 Arctic Zachariae-79N	Science	3.9	32.6	67.4